



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

DIVISION OF  
CORPORATION FINANCE

Mail Stop 3561

August 5, 2016

Charles Wheeler  
Chief Executive Officer  
Greenbacker Renewable Energy Company LLC  
369 Lexington Avenue, Suite 312  
New York, New York, 10017

**Re: Greenbacker Renewable Energy Company LLC  
Amendment No. 1 to Form 10-K for Fiscal Year Ended December 31, 2015  
Filed June 22, 2016  
Response Dated July 22, 2016  
File No. 0-55610**

Dear Mr. Wheeler:

We have reviewed your July 22, 2016 response to our comment letter and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our May 17, 2016 letter.

Item 8. Consolidated Financial Statements and Supplementary Data

Consolidated Notes to Consolidated Financial Statements

Note 7. Distributions, page 60

1. We reviewed your response to comment 4. Reference is made to your disclosure that: "All distributions paid in the years ended December 31, 2015 and 2014 have been reported as return of capital to shareholders." In light of your response and presentation of the distributions as an increase in accumulated deficit, please tell us your consideration of disclosing that all distributions paid have been reported as a return *on* capital as opposed to a return *of* capital.

Note 8. Income Taxes, page 60

2. We reviewed your response to comment 9. The reconciliation provided in the response is very similar to the disclosure in Note 8 and appears to satisfy the disclosure requirements at ASC 740-10-50-12. Please provide disclosure in a similar manner in future filings or advise why you believe such presentation is not most appropriate. In addition, reference is made to the "Plus: SMLLC income taxable" and "Other timing differences" line items in the reconciliation. Please tell us the underlying nature of these line items and why they are reconciling items. In this regard, timing differences that create deferred taxes do not result in reconciling items.

Note 10. Financial Highlights, page 62

3. We reviewed your response to comment 10. The \$8.54 per common share "Net asset value for common shares at end of period" does not include the Special Unitholder's equity balance of \$286,259 as of December 31, 2015. Further, the reconciliation on page 61 of net asset value per common share as of December 31, 2014 totaling \$8.50 to net asset value per common share as of December 31, 2015 totaling \$8.54 does not foot. The reconciliation foots to \$8.58. In future filings, please add a line item to the reconciliation that subtracts the per common share impact of the Special Unitholder's capital gains incentive distribution or explain why doing so will not be appropriate. Adding this line item to the reconciliation noted above would result in a \$0.04 subtraction and a table that foots to \$8.54.

You may contact Adam Phippen, Staff Accountant, at (202) 551-3336, or me at (202) 551-3334 if you have questions regarding comments on the financial statements and related matters. Please contact Courtney Haseley, Staff Attorney, at (202) 551-7689, or Mara Ransom, Assistant Director, at (202) 551-3720 with any other questions.

Sincerely,

/s/ William H. Thompson

William H. Thompson  
Accounting Branch Chief  
Office of Consumer Products

cc: Timothy P. Selby, Esq.  
Blake E. Estes, Esq.  
Alston & Bird LLP